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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/940,544	08/29/2001	Joun Ho Lee	8733.497.00	4753

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EXAMINER
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RAO, SHRINIVAS H

ART UNIT	PAPER NUMBER
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2814

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/940,544	<b>Applicant(s)</b> LEE, JOUN HO	
	<b>Examiner</b> Steven H. Rao	<b>Art Unit</b> 2814	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 January 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9, 11 and 20-27 is/are pending in the application.
- 4a) Of the above claim(s) 12-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-9, 11 and 20-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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***Response to Amendment***

Applicants' amendment filed on December 21, 2004 has been entered and forwarded to the Examiner on January 19, 2005.

Therefore claims 1 and 20 as amended by the amendment and claims 2-9 and 22-27 as previously recited are currently pending in the Application.

Claims 12-19 were previously withdrawn and must be cancelled in order for the response to the instant Final rejection to be complete.

***Election/Restrictions***

This application contains claims 12-19 that are drawn to an invention nonelected without traverse in paper mailed on 05/08/2003.

A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

***Information Disclosure Statement***

No further IDS have been filed after those filed on October 04, 2001 and May 08, 2003.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1-9,11 and 20-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPR ( Applicants' admitted prior art) and further in view of Ishii et al. ( U.S. Patent No. 6,525,705, herein after Ishii).

With respect to claims 1 and 20 AAPR describes an in-plane switching mode liquid crystal display device comprising: first and second substrates; ( AAPR fig. 2 #10, 20, specification page 3, line 13 ) a liquid crystal layer between the first and second substrates; ( APR fig. 2 # 22, specification page 3 line 12) gate and data lines arranged to cross each other on the first substrate to define a plurality of pixel regions; ( APR figure 1 spec. page 2 para 11) a plurality of common electrodes and data electrodes on the first substrate wherein the common and data electrodes apply an electric field to the liquid crystal layer that is parallel to the first substrate; ( AAPR spec. page 3 para 18 lines 1-6) .

AAPR does not specifically mention at least one dummy pattern overlapping at least one portion of the data lines for repairing an open region of the data lines.

However Ishii, patent from the same filed of invention describes in figure 1 and col. 8 lines 8 to 18 describe at least one dummy pattern overlapping at least one portion of the data lines for repairing an open region of the data lines to reduce line defects and thereby provide a liquid crystal display device with high quality display image and high manufacturing yield by suppressing variations in brightness of the display due to line defects.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include Ishii's at least one dummy pattern overlapping at least one

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portion of the data lines for repairing an open region of the data lines in AAPR's method /device. The motivation to make the above combination is to reduce line defects and thereby provide a liquid crystal display device with high quality display image and high manufacturing yield by suppressing variations in brightness of the display due to line defects.

The remaining limitations of claims 1 and 20 are :

wherein the portion of the data lines overlapped with the dummy pattern is electrically connected to the dummy pattern. ( Ishii col. 4 lines 1-61, etc.).

( claim 20 has the additional limitation : wherein the dummy pattern is integral with at least one of the common electrodes –Ishii figure 4 , col. 6 lines 5-10 etc).

With respect to claims 2 and 21 AAPR describes the device as claimed in claim 1, further comprising a gate insulating film between the data line and the dummy pattern. (Ishii col. 12 line 54-55).

With respect to claims 3 and 22 AAPR describes the device as claimed in claim 1, wherein the dummy pattern overlaps first and second portions of the data line.( Ishii col. 8 lines 33-50).

With respect to claims 4,5 and 23,24 AAPR describes the device as claimed in claim 1, wherein the dummy pattern is integral with at least one of the common electrodes. ( Ishii figure 4 , col. 6 lines 5-10 etc).

With respect to claims 6, 7 and 24-25 AAPR describes the device as claimed in claim 1, wherein the dummy pattern includes a transparent conductive material. ( Ishii col. 6 lines 5-25).

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With respect to claim 8 and 26 AAPR describes the device as claimed in claim 1, further comprising a common line in parallel to the gate lines. ( Ishii col. 13 lines 2 to 31).

With respect to claims 9 and 27 AAPR describes the device as claimed in claim 8, wherein the common line is electrically connected with the plurality of common electrodes. ( Ishii figure 8 , and col.8 lines 5 to 35).

With respect to claim 11 AAPR describes the device as claimed in claim 4, wherein a portion of the at least one of the common electrodes integral with the dummy pattern is electrically insulated from the common line. ( Ishii figure 8, col. 6 line 56 to col. 7 line 45).

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1-11 and 20-27 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven H. Rao whose telephone number is ( 571) 2782-1718. The examiner can normally be reached on 8.00 to 5.00.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven H. Rao

Patent Examiner

March 17, 2005.

LONG PHAM  
PRIMARY EXAMINER